

(19) World Intellectual Property Organization  
International Bureau



PCT



(43) International Publication Date  
3 August 2006 (03.08.2006)

(10) International Publication Number  
**WO 2006/080705 A1**

(51) International Patent Classification:

**D06F 39/12** (2006.01) **F16F 1/04** (2006.01)  
**A47B 91/16** (2006.01)

(21) International Application Number:

PCT/KR2005/003316

(22) International Filing Date: 6 October 2005 (06.10.2005)

(25) Filing Language: Korean

(26) Publication Language: English

(30) Priority Data:

10-2004-0079794 7 October 2004 (07.10.2004) KR  
10-2004-0079793 7 October 2004 (07.10.2004) KR

(71) Applicant (for all designated States except US): **LG ELECTRONICS, INC.** [KR/KR]; 20, Yoido-Dong, Youngdungpo-ku, Seoul 105-875 (KR).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **KWON, Ho Cheol** [KR/KR]; 89-3, Sapa-dong, Changwon-si, Gyeongsangnam-do 641-550 (KR). **SONG, Hack Jai** [KR/KR]; 706-1952, Sogye-dong, Changwon-si, Gyeongsangnam-do 641-480 (KR). **CHOI, Kang Mo** [KR/KR];

106-1301, Hyndai Apt., 253-1, Naeseo-eup, Hoiwon-gu, Masan-si, Gyeongsangnam-do 630-850 (KR). **KIM, Beom Jun** [KR/KR]; 203-2018, Seongwon 2cha Apt., Sangnam-dong, Changwon-si, Gyeongsangnam-do 631-050 (KR). **YIM, Il Hyeok** [KR/KR]; 206-1803, Sandul Maeul, 1578-1610, Ilsan2-dong, Ilsan-gu, Goyang-si, Gyeonggi-do 411-312 (KR).

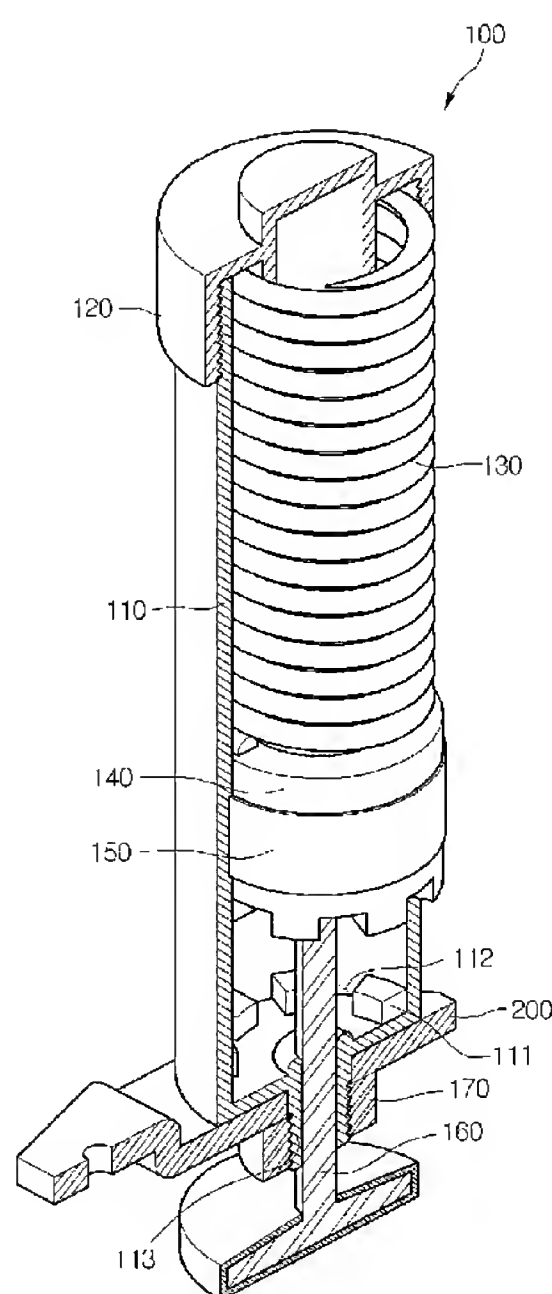
(74) Agent: **HAW, Yong Noke**; 8th F1. Songchon Bldg., 642-15, Yeoksam-dong, Kangnam-ku, Seoul 135-080 (KR).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),

[Continued on next page]

(54) Title: AUTOMATIC LEVEL CONTROLLING APPARATUS



(57) Abstract: An automatic level controlling apparatus (100) for supporting an appliance includes a hollow leg body (110), a piston (140) inserted in the hollow leg body (110), a spring (130) seated on an upper portion of the piston (140), a cap (120) disposed on an upper portion of the piston (140) to support an upper portion of the spring (130), a frictional member (150) disposed around the piston (140), and a piston rod (160) coupled to the piston (140) and supported on a floor.

WO 2006/080705 A1



European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

**Published:**

— *with international search report*